#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of :

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Thomas D. CHITTENDEN :

Serial No. : Group Art Unit:

:

Filed: : Examiner:

For: NOVEL PEPTIDES AND COMPOSITIONS WHICH MODULATE APOPTOSIS

## PRELIMINARY AMENDMENT

Honorable Commissioner of Patents and Trademarks Washington, D. C. 20231

Sir:

This Preliminary Amendment is being filed concurrently with the above-referenced application. The following amendments and remarks are respectfully submitted.

## **IN THE SPECIFICATION**

Please amend the specification as follows:

After Related Applications, please change

"This application is a continuation-in-part of United States Patent Application Serial No. 08/908,597 filed 8 August 1997, now U.S. Patent No. 5,863,795, which is a divisional application of U.S. Serial No. 08/440,391, filed May 12, 1995, now U.S. Patent No. 5,656,725." to

--This is a continuation application of US Application No. 09/236,385 filed 25 January 1999, which in turn is a continuation-in-part of United States Patent Application Serial No. 08/908,597 filed 8 August 1997, now U.S. Patent No. 5,863,795, which is a divisional application of U.S. Serial

No. 08/440,391, filed May 12, 1995, now U.S. Patent No. 5,656,725, each of which is incorporated herein by reference.--

Page 41, line 19, please change "^1DGD" to --δGD--.

Page 46, line 8, please change "^1DC" to --δC--.

Page 46, line 10, please change "^1DC" to --δC--.

Page 46, line 12, please change " $^{1}$ DC" to  $-\delta$ C--.

Page 46, line 18, please change "^1DGD" to --δGD--.

Page 46, line 22, please change "^1DGD" to --δGD--.

Page 46, line 26, please change "^1DPS" to --δPS--.

Page 46, line 27, please change "^1DC" to --δC--.

Page 47, line 3, please change "^1DGD" to --δGD--.

Page 47, line 3, please change "^1DPS" to --δPS--.

Page 47, line 14, please change "^1DC" to -- $\delta$ C--.

Page 47, line 17, please change " $^{1}DC$ " to  $-\delta C$ --.

Page 48, line 25, please change "(^1DGD mutant) to --( $\delta$ GD mutant)--.

Page 48, line 28, please change "(^1DPS Bak mutant) to --( $\delta PS$  Bak mutant)--.

Page 49, line 4, please change "^1DGD and ^1DPS" to -- $\delta$ GD and  $\delta$ PS--.

Page 51, line 7, please change "^1DGD" to --δGD--.

Page 51, line 8, please change "^1DGD and Bipla ^1DGD" to -- $\!\delta GD$  and Bipla  $\delta GD$ --.

## IN THE CLAIMS

Please cancel claims 1 through 27, without prejudice or disclaimer.

Please add new claims 28 -39. (see attached sheet)

### REMARKS

This Preliminary Amendment is submitted to correct obvious typographical errors in the specification and to present claims directed to SEQ ID NOS: 35-41. The Related Applications Section has been updated. It is respectfully requested that this Preliminary Amendment be favorably examined and entered in the above-referenced application.

### **AUTHORIZATION**

The Commissioner is hereby authorized to charge any additional fees which may be required for this Amendment, or credit any overpayment to deposit account no. 08-0219.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to deposit account no. 08-0219.

Respectfully submitted,

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Date:

# CLEAN CLAIMS

What is claimed is:

28. A method of identifying an agent capable of modulating GD domain mediated heterodimerization, comprising:

carrying out a heterodimerization assay which includes a first and a second protein or polypeptide selected from the group consisting of SEQ ID NOS: 35-41, wherein said first and second protein or polypeptide are different, and an agent;

determining whether said agent inhibits or augments heterodimerization of said first protein or polypeptide to said second protein or polypeptide;

wherein if inhibition or augmentation of heterodimerization is determined, it indicates that said agent is capable of modulating GD domain mediated heterodimerization.

29. A method of identifying an agent capable of modulating GD domain mediated homodimerization, comprising:

carrying out a homodimerization assay which includes a first and a second protein or polypeptide selected from the group consisting of SEQ ID NOS: 35-41, wherein said first and second protein or polypeptide are the same, and an agent;

determining whether said agent inhibits or augments homodimerization of said first protein or polypeptide to said second protein or polypeptide;

wherein if inhibition or augmentation of homodimerization is determined, it indicates that said agent is capable of modulating GD domain mediated homodimerization.

- 30. The method of claim 28, wherein said first and second protein or polypeptide are independently proteins or polypeptides of Bak, Bcl-x<sub>L</sub>, Bax, or Bip1a.
- 31. The method of claim 30, wherein the first protein or polypeptide is a protein or polypeptide of Bak.

- 32. The method of claim 31, wherein the first protein or polypeptide is a protein or polypeptide of Bak selected from the group consisting of SEQ ID NO: 35, 36, 37, and 38.
- 33. The method of claim 32, wherein the second protein or polypeptide is selected from proteins or polypeptides of Bcl-x<sub>L</sub>, Bax, and Bip1a.
- 34. The method of claim 33, wherein the second protein or polypeptide is a protein or polypeptide of  $Bcl-x_L$  is SEQ ID NO:39.
- 35. The method of claim 33, wherein the second protein or polypeptide is a protein or polypeptide of Bax is SEQ ID NO: 40.
- 36. The method of claim 33, wherein the second protein or polypeptide is selected from a protein or polypeptide of Bip1a is SEQ ID NO: 41.
- 37. The method of claim 29, wherein said first and second protein or polypeptide are selected from proteins or polypeptides of Bak, Bcl-x<sub>L</sub>, Bax, or Bip1a.
- 38. The method of claim 37, wherein said first and second protein or polypeptide are proteins or polypeptides of Bak.
- 39. The method of claim 38, wherein the first and second protein or polypeptide are selected from the group consisting of SEQ ID NO: 35, 36, 37, and 38.